



A STUDY ON VALUE RELEVANCE OF ACCOUNTING INFORMATION OF PUBLIC SECTOR BANKS LISTED IN NSE

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ABSTRACT

The present study aimed in providing the empirical evidence related to value relevance of EPS, BVPS, and ROE on Market share price of public sector banks listed in National Stock Exchange. Study is based on secondary data. The two techniques were used to examine the value of relevance of accounting information in public sector banks stock. Earnings per Share and Return on Equity reported a positive and negative relationship and statistically significant with share price. The present study was conducted with a sample of 12 public sector banks listed in the National Stock Exchange during the period 2018 to 2022.

KEYWORDS: Accounting information, National stock exchange, and value relevance.

INTRODUCTION:

Value relevance studies aim to explain the relationship between accounting information and stock prices or stock returns from Mishari, A. (2011). Research on capital market-based value relevance. An accounting study described by Beisland (2009). Its originality is attributed to Beaver (1968) and Kugel and Braun (1968). In the context of India, previous studies have examined the relationship between accounting information Shares were obtained from Srivastava (1968), Zahir & Khanna (1982), Krishan (1984), Chawla & Khanna.

Srinivasan (1987). Relevance is measured when there is a statistical relationship between accounting information Stock prices or stock returns from Franscie and Schipper (1999).

Vishnani and Shah (2008) found that most studies accounting information and stock prices of listed companies motivated by accounting information Used by existing shareholders and listed companies as the most important means of communication between them. Accounting information defined as quantitative written information, in whole or in part quarterly or annual financial statement cover page as shown by Oyerinde (2009).

Vijitha P. and Nimalathasan B. (2014) distinguish accounting and non-accounting information the two categories of financial information that appear on financial statements.

The main purpose of financial statements is to provide information about a company's performance financial situation and to help our users, especially Jermon and Meek investors, make better decisions (2001). Therefore, the study of the value relevance of accounting information is one of the most frequently discussed topics.

It is still debated in financial accounting studies. Motivated by the need to provide empirical evidence whether accounting information is reported more to users of accounting information, especially investors relevant to stock valuation. Research on value relevance has been done by various researchers in India.

The study fill the gap in literature by examine value relevance of accounting earnings per share, book value per share and other accounting information including return on equity on the share price of 12 public sector banks listed in National stock exchange (NSE) from 2018 to 2022.

The remaining part of this paper structured as follows: Section 2 explain the review of literature on the value relevance of accounting information, section 3 discussed methodology used in the study, section 4 focuses on the data presentation and analysis, summary and conclusion and presented in section 5.

REVIEW OF LITERATURE:

The term value relevance was defined by the different researchers, discussion based on the previous studies related to the value of relevance of accounting information in Indian context and meaning of accounting information used in the study and their empirical results from different studies.

Value relevance definition:

Different researchers from different countries defined the word value relevance in their previous studies including Beisland (2009), Ohlson (1999), Barth et al (2000) and Amir et al (1993).

Prior study in 1993 by Amir et al used the term "value relevance" and defined as the relationship between accounting figures and market value of equity. The definition of value relevance given out by Amir et al (1993) closely related with definition given out by other researchers including Barth et al (2009) and Barth et al (1998).

According to Beisland (2009) value relevance used in measuring statistical and significant relationship between accounting information and stock returns or stock price and defined value relevance as the ability of accounting information in capturing and summarizing share price. The same definition given out by Oyerinde (2009) in Nigeria.

Oyerinde (2009) define value relevance as the ability and influence of accounting of accounting numbers in capturing equity share price of listed companies at Nigeria stock exchange. Most of the commonly used accounting information in examines value relevance in the previous studies including earnings per share and book value per share commonly used in measuring its value relevant in equity valuation as stated by Oyerinde (2009).

Value relevance research aimed in finding out whether accounting information published in the financial statements provide useful and valuable information for the users of accounting information especial investors as stated by Negakis (2005) as cited from Mishary A. (2011).

While Barth el (2001) argue that research on the value relevance very important to the users such as investors, accounting standard setters and other users because aimed in extending knowledge regarding value and useful of accounting information as reflecting equity value as cited from Mishary,A.(2011).

From the review of literature related to the value relevance definition, this study defined the term value relevance the same way as it was stated by previous researcher including Beisland (2009) and Oyerinde (2006).

Previous study on value relevance of accounting information in India.

Previous study on the value relevance of accounting information of book value, earnings and dividend on the share price of public and private sector listed in Indian stock market has been done by Sharma, M. (2014). Twenty companies each selected from public and private sector used as a sample in the study and results reported dividend and book value to be more relevant in private sector but in public sector only dividend found to be more relevant while book value and earnings reported to decline its value relevance. The results found to be inconsistent compared to another comparative study done in Nigeria by Oshodin and Chijoke (2014) used a sample of 10 companies each from petroleum and banking sector listed in Nigeria stock exchange. They reported earnings per share to be more relevant on share price of petroleum and banking sectors.

On the other hand Charumathi and Suraj (July – September) examine value relevance of earnings and book value on the share price of 14 banks (6 banks from private banks sector and 8 banks from public banks sector) listed in Bombay stock exchange from 2001 to 2010. They employed regression analysis with theoretical framework of Ohlson valuation model (1995) and reported accounting information of book value and earnings per share to have positive and significant relationship with share price of 14 banks stock. The result found to be consistent compared to the recent study done by Khanna, M (2014) in Bombay stock exchange.

But book value per share found to be more relevant than earnings for equity valuation of banks stock by Charumathi and Suraj (July – September). On the other hand Sharma, Singh and Kumar (2012) used a sample of 71 non-financial companies listed in National stock exchange and reported accounting information of return on equity to be more relevant for equity valuation in Indian market. The results found to be not similar compared to the previous study done by Germon and Meek (2000). They reported return on equity to have low relationship with share price of 30 companies listed in Nigeria stock exchange.

OBJECTIVES:

The Main objective of the study is to identify the impact of the value relevance of accounting Information on Share Market Vulnerability of listed manufacturing companies in India. To achieve above objective the following sub objectives were formulated.

1. To find out the value relevance variables among the financial related variables such as Earning per Share [EPS], Book Value per Share [BVPS] and Return on Equity [ROE] of public sector banks listed in National Stock Exchange [NSE].
2. To study the association between the value relevance of accounting information and Market Vulnerability.

Analysis of accounting information as independent variables and market share price as dependent variable.

Accounting information such as earnings per share, book value per share, return on equity used as independent variables in explaining market share price of public banks sector listed in National stock exchange (NSE) and the variables taken on annual basis based on the period of the study from 2018 to 2022.

Dependent variable:

Market share price:

Oyerinde, D.T. defined market share price as the value the market allocates to the company's stocks (2009). Anita and Yadav (2014) used the closing price at the end of the financial year as a stand-in for the market share price, while Shobhana and Karpagavalli (2011), Sharma, S. (2011), and Karpagavalli and Nirmala (2014) used market share price calculated by taking into account the average of the highest market price and the lowest market price of the shares during the financial year. Market share price was computed for the study's purposes using the same formula employed by Indian researchers Shobhana and Karpagavalli (2011), Sharma, S. (2011), and Karpagavalli and Nirmala (2014).

Independent variables:

Earnings per share:

The study conducted by Bhatt and Sumangala deemed earnings per share to be the most frequently utilised accounting information in value relevance studies used to analyse its substantial association with share, price example (2012). By utilising the method they provided, earnings per share is computed by dividing gross income by the entire number of outstanding shares. This includes income before taxes, interest, and depreciation. The majority of research looking at the impact of earnings per share on stock price reported results that were significant and in favour of the stock price, which was backed by Pathirawasam, C.'s findings (2010) in Sri-Lanka observed earnings per share to have positive value relevance on the market share price of 129 companies selected from 6 major sectors listed at Colombo stock exchange and other study done by different researchers including Tharmila, K. (2013) and Vijitha, and Namalathan (2014) in Sri-Lanka, by Ragab, A.A. (2006) in Egyptian market, Miah, M.S. (2012) in Bangladesh, Thompson, S. and Adah, A. (2012) and Olugbenga and Oyerinde (2014) in Nigeria and Shamki and Rahman (2012) in Jordan reported the same results.

Book value per share:

Value relevance of accounting information before and after the reforms of International reporting standard (IFRS).

Karn, S. (2013) examined the value relevance of accounting information before and after the IFRS reforms and found an improvement in the value relevance of book value over the post-IFRS period (2005-2011). The outcomes were similar with the research conducted by Bilgic and Ibis (2013). A sample of 113 businesses listed on the Istanbul Stock Exchange were used by Bilgic and Ibis to report on the value significance of a growth in book value following the adoption of new accounting rules. However, Khanaga, J. B. (2011) observed that after Bahrain and the United Arab Emirates changed their accounting standards, the value relevance of book value per share decreased using a portfolio and regression technique.

On the other hand, Olugbenga and Oyerinde (2014) reported that the value relevance of accounting information was weak during the period of the global economic crisis (2005-2009) and the political crisis due to military dictatorship (1992). -1998) Nigerian Stock Market Crisis Thompson, S. and Adah, S. (2012) found that the book value per share was significantly higher than the share price of a cement manufacturing company listed on the Nigerian Stock Exchange reported being in a relationship. On the other hand during post recession period book value per share reported to have positive relationship and insignificant

impact on the stock prices of BSE 200 companies by Sukhija, S. (2014).

Return on Equity:

Return on equity defined as the profitability ratio which measure amount of profit earned by the company from the amount of money invested by the shareholders in the company, The same definition given by Malik and Ali (2013). Mathematically the ratio calculated by taking net income divided by shareholder's equity as stated by Malik and Ali (2013), but by using the formula given by Wang, Fu and Luo (2013) return on equity calculated by taking net profit divided by average net assets. The ratio reported to have positive and significant relationship with share price of commercial banks listed in Colombo stock exchange (CSE) in Sri-Lanka from 2006 to 2009 in the study done by Perera and Thrikawala (2010) on the share price commercial banks listed in CSE from 2006 to 2009. In examine value relevance of accounting information they used other accounting information such as earnings per share and earning yield and reported to have positive and significant relationship with share price of commercial banks listed in CSE.

On the other hand Vijitha and Nimalathasan (2014) examine value relevance of return on equity, book value per share, earnings per share and price earnings ratio on the share price of 20 manufacturing companies listed in CSE from 2008 to 2012. They reported accounting information of return on equity to have positive and strong significant relationship with share price of 20 manufacturing companies listed in CSE but does not have significant impact on the share price. Other accounting information such as earnings per share and book value per share reported the same results, except price earnings ratio reported to have weak and negative relationship with share price. A sample of 129 companies selected from 6 major sectors listed in CSE used by Pathirawasam, C. (2010) as a sample and examine value relevance of return on equity, earnings per share and book value per share. All three financial information showed a positive and significant relationship with the stock prices of the selected companies sampled in the study. Also in Pakistan, Malik and Ali (2013) reported that return on equity was positively and significantly related to share prices of listed companies in the fuel and energy sector listed on the Karachi Stock Exchange.

Hypotheses development:

Based on the reviews of the value relevance literature found in Utami and Noraya, (2010) studies the impact of financial statement information on capital markets indicators referred to as the value relevance studies and it is part of the market-based accounting stream. Information is considered 'Value Relevant' if stock price movements are associated with the release of such information (2010). And Gjerde, Knivsfla and Sættem, (2007) studied the value relevance of accounting information in Norway's Capital Market within 1965-2004. They claimed that the value relevance of accounting information during this period has not decreased and changing from European-Continental model to American-British had positive impact on value relevance of financial reports information.

HYPOTHESES:

H1: There is an impact of value relevance of accounting information on market Vulnerability.

H2: The Value relevance of accounting information is significantly correlated with Market Vulnerability.

METHODOLOGY:

Scope:

The scope of the study is listed manufacturing companies on NSE, India. Twelve public sector banks were selected for the study purpose as convenience.

The Banks include:

Table 1. List of public sector banks taken as sample from National Stock Exchange [NSE].

S.No	Name of the Bank
1	SBI
2	Bank of Baroda
3	Canara Bank
4	PNB
5	IOB
6	Union Bank
7	Indian Bank
8	Bank of India
9	Central Bank
10	UCO Bank
11	Bank of Maharashtra
12	Punjab & Sind

Data Sources:

In order to achieve the objectives of the study, data was collected from secondary sources. The data collected mainly from financial report of the selected banks,

which were published by NSE in India.

Reliability and validity:

The secondary data collected from the audited financial reports [i.e., Comprehensive income statement and financial position] of the concerned banks as fairly accurate and reliable. It is considered to be reliable. The necessary checking and cross checking were done while scanning information and data from the secondary sources. All these made in order to generate validity of the data for the study.

Mode of analysis:

After collecting the data, the statistical tools were applied for the analysis. In this study correlation and regression techniques were used.

The following regression model developed for the purpose of examine the relationship between earnings per share, book value per share, return on equity and share price The statistical model is as specified below:

$$MSP_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 BVPS_{it} + \beta_3 ROE_{it} + \mu_{it}$$

Where:

β_0 , β_1 , β_2 , and β_3 are regression coefficient of accounting variables;

MSP, EPS, BVPS, ROE are named as market share price, earnings per share, book value per share, return on equity respectively and μ is the stochastic error correctional term and i and t represents firm and time (year).

Data presentation and analysis:

Table 2: Descriptive statistics of accounting information and share price

Variables	MEAN	MIN	MAX	STD
MVPS	91.5075	10.7	531.15	112.9433
EPS	-4.4145	-5.34	39.64	22.163
BVPS	139.442	230.23	414.75	127.262
ROE	-5.8167	-2.21	11.71	16.1386

Msp=Market share price; Eps=Earnings per share; Bvps=Book value per share; Roe=Return on Equity

Descriptive statistics of EPS, BVPS, ROE and share price of 12 public sector banks listed in National Stock Exchange [NSE] presented in table no 2. The highest value of standard deviation perceived in MVPS is 127.262 and the lowest recorded at 22.163. The ROE recorded minimum of -2.21 and maximum at 531.15.

Table 3: Correlation analysis result between variables

Variables	MVPS	EPS	BVPS	ROE
MVPS	1	0.35328	0.76474	0.35141
EPS	0.35328	1	0.35141	0.59816
BVPS	0.76474	0.30618	1	0.35956
ROE	0.35141	0.59816	0.35956	1

**Correlation is significant at the 0.01 level.

The description about the relationships between accounting information and share price is presented in Table 3. From the results presented the correlation coefficient between EPS and share price found to be 0.35328 at 1% level of significance. Based on that conclusion can be made that there is a strong positive correlation between EPS and share price at 1% significance level. The correlation coefficient between BVPS and share price is 0.76474 which is significance at 1% level. It indicated a strong positive correlation between BVPS and share price at 1% significance level. On the other hand the correlation coefficient between ROE and share price is 0.35141 which is significance at 1% level.

Table 4: Regression analysis

Regression Statistics		
Multiple R		0.353281583
R Square		0.124807877
Adjusted R Square		0.109718358
Standard Error		106.567423
Observations		60

Table 5: ANOVA

ANOVA					
	df	SS	MS	F	Significance F
Regression	1	93932.42125	93932.42125	8.271163181	0.005625668
Residual	58	658683.7079	11356.61565		
Total	59	752616.1291			

From the results presented in the regression among selected variables. The R square value is 0.1248, Adj R square value is 0.109, with 60 observations. The regression F value is 8.2711. The variation of market share price has been explained by accounting information.

SUMMARY AND CONCLUSION:

The study examine value relevance of earnings per share, book value per share, return on equity on the share price of 12 public sector banks listed in National stock exchange (NSE). Particularly the study attempt to determine the most value relevant accounting information used for equity valuation in public sector banks in NSE and finding out if there is significant relationship exist between accounting information used in the study and share price. Correlation analysis were used to examine the value relevance of accounting information and finding out the significant relationship between share price and accounting information. The study provides empirical evidence that an earnings per share is the most relevant accounting information for equity valuation in public sector banks.

The results are consistent with those of the studies conducted Ragab of Egypt, A (2006), His Vijitha P. and Nimalathasan B of Sri Lanka (2014), Pathirawasam, C. (2010) Olugbenga and Oyerinde (2014) from Nigeria, which contradicts the work by Khanna, M. (2014). Book value per share determined to adversely affect share price, earnings determined Charumathi and Suraj (July-September), Sukhija, S. (2014), contradicts studies by Tharmila. K and Nimalasasan. B (2013), Thompson, S. and Adah, S. (2012) and Mishary, A. (2011) and other accounting information have a negative and immaterial impact on the stock price, such as return on equity or capital turnover; this result also differs from a study by M.F. Malik and Ali, B. (2013) and Sharma, Kumar and Shin (2012). On the other hand, accounting information such as earnings per share and book value per share.

REFERENCES:

- I. Ball, R. and P. Brown (1968), "An Empirical Evaluation of Accounting Income Numbers", *Journal of Accounting Research*, 6(2), 159-178.
- II. Beisland, L. A. (2009), "A Review of the Value Relevance Literature", *The Open Business Journal*, 2, 7-27.
- III. Beaver, W. (1968), "The Information Content of Annual Earnings Announcements", *Journal of Accounting Research*, 6, 67-92.
- IV. Hausman, J.A. (1978), "Specification Tests in Econometrics, *Econometrica*, 46(6), 1251-1271.
- V. Karpagavalli and Nirmala (2013), "Determination of Market Price of Select Banking Companies by Using Year Wise Y-X Correlation Analysis", *Gra - Global Research Analysis*, 3.
- VI. Khanna, M. (2014), "Value Relevance of accounting information: An empirical study of selected Indian firms", *International Journal of Scientific and Research Publications*, 4(10).
- VII. Mishari, A. (2011), "Usefulness of earnings and book value for equity valuation to Kuwait stock exchange participants", *International Business and Economic Research Journal*, 10(1).
- VIII. Mukherjee, C., H. White, and M. Wuyts, (1998), "Econometrics and Data Analysis for Developing Countries, ed.P. Mosley, *Priorities for Development Economics*, Routledge, New York.
- IX. Olugbenga, A and Oyerinde, A. (2014), "The Relationship between Financial Accounting Information and Market Values of Quoted Firms in Nigeria", *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics (GJCRA)*, 1.
- X. Olugbenga, A & Oyerinde, A. (2014), "Value Relevance of Financial Accounting Information of Quoted Companies in Nigeria: A Trend Analysis", *Research Journal of Finance and Accounting*, 5(8).
- XI. Oshodin and Chijoke (2014), "The comparative study of value relevance of financial information in the Nigeria banking and petroleum sectors", *Journal of Business Studies Quarterly*, 6(1).
- XII. Ohlson, J.A (1995), "Earnings, book values and dividends in security valuation", *Contemporary Accounting Research*, 11(1), 661-688.
- XIII. Oyerinde (2009), "Value- relevance of accounting information in the Nigerian stock market", PhD Thesis, Covenant University, Ota, Nigeria.
- XIV. Ozlen, S. (2014), "The effect of company fundamentals on stock values", *European Researcher*, (71), 3-2.
- XV. Pathirawasam, C. (2010), "Value relevance of accounting information: Evidence from Sri Lanka", *International Journal of research in commerce & management*.
- XVI. Papadaki and Georgia Siougle. (2007), "Value relevance of price, earnings and book values in the Athens Stock Exchange", *Managerial Finance*, 33(5), 309-320.
- XVII. Perera, A.A. & Thrikawala, S. S. (2010), "An empirical study of the relevance of accounting information on investor's decisions, *Proceedings of international research conference on business & information*".
- XVIII. Sharma, M. (2014), "Value relevance of accounting information: A comparative study of public and private sector companies in India", *Asia Pacific Journal of Research*, 11(XII),
- XIX. Sharma, A, Kumar, S, & Singh, R (2012), "Value Relevance of Financial Reporting and Its Impact on Stock Prices: Evidence from India", *South Asian Journal of Management*, 19(2), 60- 77.
- XX. Shobhana and Karpagavalli (2011), "Determinants of market price of shares of the

select banking companies listed at Bombay stock exchange”, An International Multidisciplinary Research Journal, 1(3).

- XXI. Vijitha P. and Nimalathasan B, (2014), “Value relevance of accounting information and share price: A study of listed manufacturing companies in Sri Lanka”, Merit Research Journal of Business and Management, 2(1), 001- 006.
- XXII. Wang, Fu & Lou (2013), “Accounting Information and Stock Price Reaction of Listed Companies: Empirical Evidence from 60 Listed Companies in Shanghai Stock Exchange”, Journal of Business & Management, 2(2), 11-21.